Public Works (1907) Department.

G.O., No. 413 / 414 } I

DATED 26-9-1907.

30. 9. 07.
120/4 copies of G.O.
60/2 copies of Govt with clock that the back for the Govt of India.

[Despatch Abstract.]

Kodimangalam Kanmoy, Madura Dt

~~An~~ revised Estimate, amounting to Rs 2398, for improving ———, sanctioned and a copy of the Pros: ordered to be forwarded to the Govt of India for information

=

Kodimangalam Kanmoy, Madura Dt

Forwarding to the Govt of India a copy of the Pros: sanctioning ~~an~~ revised Estimate, amounting to Rs 2398, for improving ———

P. W. 26. Indexed.

Asnt 26/9   Indexed 27/9/07   789/Ir/Dr

Sanction Regd No. 95.2. of 07-08 25.9

No. 413 I., 26TH SEPTEMBER 1907.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following papers:—

I

G.O., No. 997 I., dated 9th September 1904.

ABSTRACT.—An estimate, amounting to Rs. 1,328, for improving the Kodimangalam tank, Periyár project, sanctioned.

II

Letter—from C. W. WOOD, Esq., Superintending Engineer, VI Circle.
To—the Chief Engineer for Irrigation.
Dated—Trichinopoly, the 5th August 1907.
No.—426-C.E.

In G.O., No. 997 I., dated 9th September 1904, an estimate, amounting to Rupees 1,080, was sanctioned for improvements to Kodimangalam kanmoy, one of the Periyár-affected tanks in the Madura district. The Executive Engineer, Madura Division, having found, during execution, that the sanctioned surplus arrangement was not suitable for reasons set forth in his letter No. 447, dated 9th July 1907 (copy enclosed), and in the report attached to the revised estimate, converted the calingulah into a flush weir 89½ feet long and the natural byewash into a paved byewash 284 feet long. The Executive Engineer also reports that the F.T.L. was originally fixed 6 inches too low. The crest of the weir has now been fixed at the correct F.T.L. + 52·50.

The excess over the sanctioned amount, for which sanction of Government is now required, is Rs. 870, as detailed in the comparative statement of differences attached to the revised estimate.

The Executive Engineer has, it is understood, nearly completed the work according to the revised estimate and plans herewith forwarded for your approval and sanction of Government.

The original sanctioned plans are also enclosed for your information.

ENCLOSURES.

Letter—from A. R. DECHAZAL, Esq., Executive Engineer, Madura Division.
To—the Superintending Engineer, VI Circle.
Dated—the 9th July 1907.
No.—447-S.E.

With reference to your No. 2243, dated 7th June 1907, I have the honour to state that the calingulah had been partly completed and materials for the rest of the work had been collected. It was, in my opinion, a mistake to build a calingulah to such a shallow tank, with the calingulah far away from the village.

I had to take action on the spot and could not let the work drag on another year. The calingulah had made the tank nearly useless, as its vents were continually being opened by the lower ryots. I think that most other Executive Engineers would have acted in the same way that I did and not delayed such a small work until the Chief Engineer had time to give orders on it. I cannot give any other explanation but that I did the best I could under the circumstances.

I enclose the original sanctioned estimate and plans.

Report to accompany the revised estimate for improvements to No. 95, Kodimangalam tank in Madura taluk.

	RS.
Amount of estimate	1,950
Amount of original estimate sanctioned in Register No. 171 of 1904–05.	1,080
Net amount required sanction ...	870

General.—The original estimate was sanctioned in G.O., No. 997 I., dated 9th September 1904.

The Madura-Nattam road crosses the tank. The supply channel and surplus arrangements fall on one side of it and the tank proper on the other. These two sides are connected by a road culvert of two vents 7′ × 4′ each with sill at + 50·00, the bottom of covering stone being at + 54·00.

Surplus arrangements.—The crest of the calingulah, as sanctioned, is + 51·50. This is 6 inches too low. It is difficult to close the spaces between the upright stones and much valuable water is lost. The site is suitable for a flush weir, the existing calingulah is 89½ feet long. The additional length, 284 feet, will be provided to the right of it.

By the Superintending Engineer.

Top of damstones + 52·50.

Sluices.—The original estimate provides for the construction—

(1) A 9-inch pipe sluice at C.S. No. 10,
(2) A 12 do. do. „ 9,
(3) A 9 do. do. „ 3,

with their sills at + 49·78, + 47·41 and + 49·46, respectively, from the left flank.

The sanctioned site of sluice No. (1) (at C.S. No. 10) will be shifted to 1,600 feet in the L.S. as that place is better.

The existing temporary pot sluice at this place being left alone for the present.

Fresh hydraulic statements have been attached to this estimate.

Hydraulic calculations—No. 95, Kodimangalam tank.

	Square miles.
Area of free basin	·50
Combined catchment area	10·15

Discharge to be provided for—

$$D = C.M.^{\frac{2}{3}} - C.M.^{\frac{2}{3}}.$$
$$= 500 \times 10{\cdot}15^{\frac{2}{3}} - 9{\cdot}65^{\frac{4}{5}}.$$
$$= 500 \times 4{\cdot}6879 - 100 \times 453{\cdot}26.$$
$$= 2343{\cdot}95 - 453{\cdot}26.$$
$$= 1890{\cdot}59.$$

Or, say, 1,891 cusecs.

Discharge provided for—

(*a*) Over the masonry weir.

(i) Between damstones—

$$D = 3{\cdot}1\, lh^{\frac{3}{2}}.$$
$$= 3{\cdot}1 \times 87 \times \tfrac{5}{2}^{\frac{3}{2}}.$$
$$= 3{\cdot}1 \times 87 \times \tfrac{5}{2} \times 1{\cdot}58^{11}.$$
$$= 1{,}066{\cdot}05 \text{ cusecs.}$$

(ii) Over weir portion and damstone—

$$D = 3{\cdot}1\ lh^{\frac{3}{2}}.$$
$$= 3{\cdot}1 \times 33 \times \tfrac{3}{2}^{\frac{3}{2}}.$$
$$= 3{\cdot}1 \times 33 \times \tfrac{3}{2} \times 1{\cdot}224.$$
$$= 187{\cdot}93 \text{ cusecs.}$$

Total discharge over the weir portion—

1066·05 + 187·93

Or 1253·98.

Or, say, 1,254 cusecs.

(*b*) Discharge over the paved byewash—

$$D = \tfrac{2}{3} \times C \times lh\ \sqrt{rgh}.$$
$$= \tfrac{2}{3} \times \tfrac{7}{16} \times 50 \times \tfrac{3}{2} \times \sqrt{64 \times 1{\cdot}5}.$$
$$= \frac{2}{3} \times \frac{7}{16} \times \overset{25}{50} \times \frac{3}{2} \times 8 \times 1{\cdot}2247.$$
$$= 214{\cdot}32.$$

Or, say, 214 cusecs.

(*c*) Discharge over the natural byewash—

$$D = \tfrac{2}{3}\ clh\ \sqrt{rgh}.$$
$$= \tfrac{2}{3} \times \tfrac{3}{8} \times 120 \times \tfrac{3}{2} \times \sqrt{64 \times 1{\cdot}50}.$$
$$= \frac{2}{3} \times \frac{3}{8} \times 120 \times \frac{3}{2} \times 8 \times 1{\cdot}22{\cdot}47.$$
$$= 440{\cdot}8920.$$

Or, say, 441 cusecs.

Total discharge provided for over the masonry weir paved byewash and the natural byewash

= 1254 + 214 + 441.
= 1,909 cusecs.

Estimate form—Comparative statement of differences.

Description of work.	Original estimate. Quantity.	Original estimate. Rate.	Original estimate. Amount.	Revised estimate. Quantity.	Revised estimate. Rate.	Revised estimate. Amount.	More.	Less.	Explanation of difference.
1	2	3	4	5	6	7	8	9	10
IMPROVEMENTS TO NO. 95, KODIMANGALAM TANK, MADURA TALUK.		RS.	RS.		RS.	RS.	RS.	RS.	
Estimate Rs. 1,080. *Register No.* 171 *of* 1904–1905.									
49. Capital.									
1. Constructing No. 1 9" cement pipe sluice.	..	..	165	..	..	165	..	..	
2. Do. No. 2 12" pipe sluice ..	..	..	225	..	..	225	..	..	
3. Do. No. 3 9" cement pipe sluice.	..	..	165	..	..	200	35	..	Please see detail report.
4. Do. escapes at right flank ..	..	..	525	..	..	..	} 835	..	
Do. do. weir ..	..	..	..	..	..	650		..	
Do. do. byewash ..	..	..	..	..	..	710		..	
Total ..	..	..	1,080	..	..	1,950	870	..	
Deduct—Amount sanctioned in Register No. 171/1904–1905 ..						1,080	..	..	
Net amount requiring sanction ..						870	870	..	

A. R. DECHAZAL,
Ex. Engr., Madura Division.

III

Note by the Chief Engineer for Irrigation.

The revised estimate is recommended for sanction.

19*th September* 1907.

H. E. CLERK,
Ag. Chief Engineer for Irrigation.

Order—No. 413 I., dated 26th September 1907.

The following revised estimate is sanctioned in supersession of the one sanctioned in the order quoted above :—

Capital Expenditure not charged to Revenue.
49. Irrigation.
Periyár Project.
Open Capital Account.
I. Works.
3. Distributaries.
C. Works.
Unremunerative Work.
Improving Kodimangalam kanmoy.

Estimate—	RS.
I. Works	1,950
II. Establishment	448
Total ..	2,398

2. This sanction is registered as No. 95 I. of 1907–1908 and will expire on 31st March 1908.

3. Ordered that a copy of these Proceedings be forwarded to the Government of India for information in continuation of endorsement No. 998 I., dated 9th September 1904.

[Here enter No. 414 I., dated 26th September 1907.]

(True Extract.)

H. E. CLERK,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Chief Engineer for Irrigation.
,, Superintending Engineer, VI Circle, with plans and estimates.
,, Examiner, Public Works Accounts.

Endorsement—No. 414 I., dated 26th September 1907.

Forwarded.

(By Order.)

H. E. CLERK,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

IRRIGATION.
ACCOUNT.

Government of Madras.

PUBLIC WORKS DEPARTMENT.

Recd.	1907.	*Enclosures*
Regd.		*Spare copies*

G.O., Nos. 413, 414 I., 26th September 1907.

Kodimangalam kanmoy, Madura district

Forwarding to the Government of India a copy of the Proceedings sanctioning a **revised** estimate, amounting to Rs. 2,308, for improving —.

1,000—29-9-06.

NOTES.

From the Govt. [illegible] Dated 24th October 1905 No 142[illegible]

by the Govt. of India is
registered as No. [illegible]
1905-06 and will expire
31st March 1907. The
is Classified as shown [illegible]

Imperial.

Capital expenditure not
charged to [illegible]

49. Irrigation [illegible]
[illegible]
Other Capital [illegible]
[illegible] work

[illegible]

C. Works.

Unremunerative Works

Improving Kodinaugatam

Channel again

Estimate.

Establishment 448

Total 2370

to Regis-

-tered and ...

07-08.

... will ...

3.

... these Proceedings be forwarded

to the Govt. of India for

... innovation

... document No 999 ...

Endorsement ...

Forwarded

The Chief Engineer for Irrigation

The Supdg. Engineer II Circle

R5103

Estimate for improving Kodimangalam Kanmai, Periyar Project

CURRENT No. 8919
PUBLIC WORKS DEPARTMENT
IRRIGATION BRANCH
U. R.
REF.
R. R.
D. O.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ again the following

G. O. No. 997-I, dated 9th September 04.

Read also

From the Supg: Engineer, VI circle, dated 5. 8. 07 No. 42...

Note by Chief Engineer for Irrigation.

The revised estimate is recommended for sanction.

Order No. 4139 I, dated 26-9-07

The following revised estimate is sanctioned in supersession of the one sanctioned in the order quoted above:—

Capital Expenditure not charged to Revenue.

49 – Irrigation.

Periyar Project.

Open Capital Account

I Works.

3. Distributaries.

C. Works.
Unremunerative Work.
Improving Kodimangalam
Kanmoy again.
Estimate. I Works. Rs 1,950
II Establishment 448
Total 2,398.

2. This sanction is registered as No 95 I of 07-08; and will expire on 31.3.08.

3. Ordered that a copy of these Proceedings be forwarded to the Govt. of India for information in continuation of endorsement No 998 I dt 9.9.04.

Endorsement No 1614 I of 26-9-07
Forwarded.

DESPATCHED
18 OCT 1907

DESPATCHED
17 OCT 1907

18/9/07

To The Chief Engineer for Irrigation.
" The Supg: Engineer, VI circle with plans and Estimates
" The Examiner, P. W. accounts.
ordinary Press.

[illegible] 177-1 dated [illegible]

Read also

[illegible] dated [illegible]

Order

[illegible]

Capital Expenditure [illegible]

Remarks

[illegible]